
**THE REPORT OF THE
ANNUAL ACTUARIAL VALUATION
OF THE
CITY OF LINCOLN POLICE AND FIRE PENSION FUND
AUGUST 31, 2006**

**SUBMITTED TO
THE CITY COUNCIL
CITY OF LINCOLN POLICE AND FIRE PENSION FUND
LINCOLN, NEBRASKA**

GRS

Gabriel Roeder Smith & Company

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February 8, 2007

The City Council
City of Lincoln Police and Fire Pension Fund
Lincoln, Nebraska

Ladies and Gentlemen:

Submitted in this report are the results of the annual actuarial valuation of the benefits provided by the City of Lincoln Police and Fire Pension Fund.

The date of the valuation was August 31, 2006.

Valuation results are contained in Section A.

Governmental Accounting Standard information is contained in Section B.

Gain Loss, historical data and comments are contained in Section C.

The valuation was based upon information, furnished by the City, concerning Pension Fund benefits, financial transactions, individual active members, terminated members, DROP members, retirants and beneficiaries. Data was checked for year to year consistency but was not otherwise audited by us. This information is summarized in Section D.

Descriptions of the actuarial cost methods and actuarial assumptions are contained in Section E, along with a glossary of technical terms.

To the best of our knowledge this report is complete and accurate and was made in accordance with generally recognized actuarial methods in compliance with the Pension Fund provisions. The actuarial assumptions used for the valuation produce results which we believe are reasonable.

Respectfully submitted,

Louise M. Gates, ASA

W. James Koss, ASA, EA

LMG/WJK:dm

SECTION A



VALUATION RESULTS

ACTUARIAL BALANCE SHEET - AUGUST 31, 2006

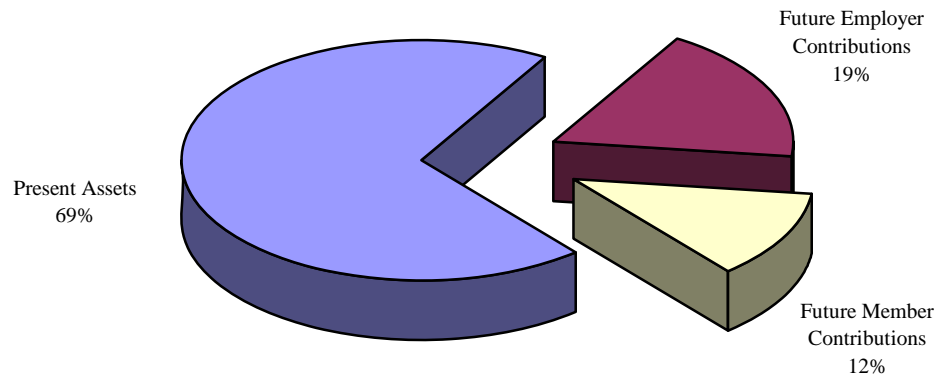
Present Resources and Expected Future Resources

A. Valuation assets	Net assets from system financial statements (market value)	\$164,696,618	\$157,527,392
	Valuation adjustment	(7,169,226)	
	Valuation assets		
B. Actuarial present value of expected future employer contributions	For normal costs	37,334,069	41,389,962
	For UAAL	4,055,893	
	Total		
C. Actuarial present value of expected future member contributions			26,943,371
D. Total Actuarial Present Value of Present and Expected Future Resources			\$225,860,725

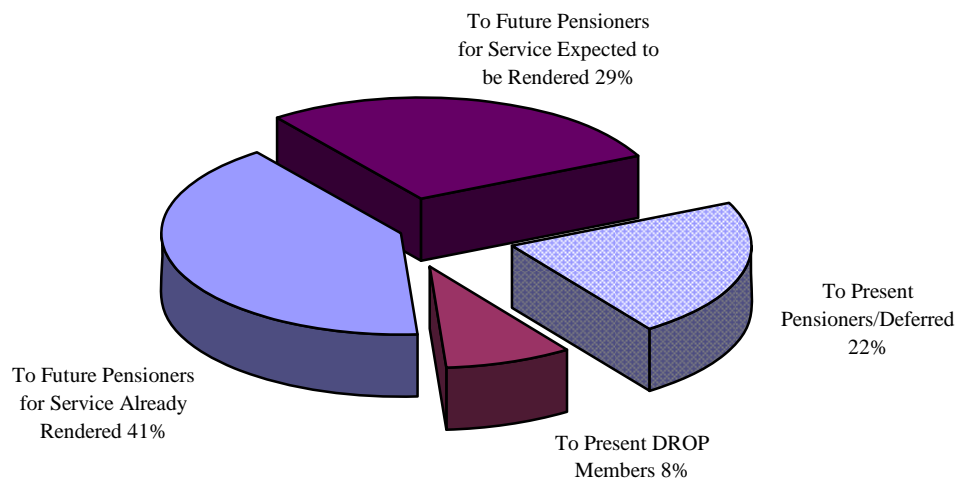
Actuarial Present Value of Expected Future Benefit Payments and Reserves

A. To retirants and beneficiaries		\$ 48,627,181
B. To DROP members		19,102,651
C. To vested terminated members		1,810,535
D. To present active members	Allocated to service rendered prior to valuation date	\$92,042,918
	Allocated to service likely to be rendered after valuation date	64,277,440
	Total	156,320,358
E. Total Actuarial Present Value of Expected Future Benefit Payments		\$225,860,725

SOURCES AND USES OF FUNDS AS OF AUGUST 31, 2006



Sources of Funds



Uses of Funds

COMPUTED CONTRIBUTIONS FOR THE FISCAL YEAR BEGINNING SEPTEMBER 1

Contributions for the Indicated Fiscal Year	Contributions Expressed as Percents of Payroll*	
	2007	2006
<i>Normal Cost</i>		
Age & Service Benefits	15.62 %	15.58 %
Disability Benefits	0.48 %	0.48 %
Death Before Retirement	0.53 %	0.53 %
Deferred Age & Service Benefits	1.40 %	1.42 %
Refund of Member Contributions	0.60 %	0.60 %
Total	18.63 %	18.61 %
<i>Member Contributions (weighted average)</i>	7.90 %	7.89 %
<i>Employer Normal Cost</i>	10.73 %	10.72 %
<i>Amortization Payment</i>		
Unfunded Actuarial Accrued Liability	1.42 %	2.36 %
EMPLOYER CONTRIBUTION RATE	12.15 %	13.08 %

* Payroll for active members not included in the DROP

Unfunded actuarial accrued liabilities as of August 31, 2006 were amortized as a level percent of active member payroll over a period of 10 years. A procedure for determining dollar contribution amounts is described on the following page.

FINANCIAL OBJECTIVE

The financial objective of the Pension Fund is to establish and receive contributions, expressed as percents of active member payroll, which will remain approximately level from year-to-year and will not have to be increased for future generations of citizens. This objective meets the requirements of the laws governing the operation of the Pension Fund.

CONTRIBUTION RATES

The Pension Fund is supported by member contributions, City contributions and investment income from Pension Fund assets.

Contributions which satisfy the financial objective are determined by an annual actuarial valuation and are sufficient to:

- cover the actuarial present value of benefits assigned to the current year by the actuarial cost methods described in Section E (the normal cost); and
- amortize over a period of future years the actuarial present value of benefits not covered by valuation assets or anticipated future normal costs (unfunded actuarial accrued liability).

DETERMINING DOLLAR CONTRIBUTIONS

For any period of time, the percent-of-payroll contribution rate needs to be converted to dollar amounts. We recommend the following procedure:

Contribute dollar amounts at the end of each payroll period which are equal to the City's percent-of-payroll contribution requirement multiplied by the covered active member Non-DROP payroll for the period. Adjustments should be made as necessary to exclude items of pay that are not covered compensation for Pension Fund benefits and to include special payments that are covered compensation.

DEVELOPMENT OF FUNDING VALUE OF RETIREMENT SYSTEM ASSETS

Year Ended August 31:	2004	2005	2006
Beginning of Year Values			
(1) Cost Value	\$127,547,831	\$130,423,543	\$136,001,209
(2) Market Value	128,083,863	137,781,079	153,324,765
(3) Funding Value	132,577,506	136,973,679	145,730,474
(4) Non Investment Net Cashflow	(3,360,602)	(2,780,701)	(2,509,252)
(5) Expected Income (7.5%)	9,819,569	10,170,635	10,837,390
(6) Actual Income	13,057,818	18,324,387	13,881,104
(7) Gain/(Loss)	3,238,249	8,153,752	3,043,714
(8) Recognized Income			
(a) Expected	9,819,569	10,170,635	10,837,390
(b) Current Year's Base	809,562	2,038,438	760,929
(c) 1 year ago	(140,146)	809,562	2,038,438
(d) 2 years ago	(1,340,994)	(140,146)	809,562
(e) 3 years ago	(1,391,216)	(1,340,993)	(140,149)
(f) Total Income Recognized	7,756,775	11,537,496	14,306,170
End of Year Values			
(9) Cost Value	130,423,543	136,001,209	142,664,280
(10) Market Value	137,781,079	153,324,765	164,696,618
(11) Funding Value (3) + (4) + (8f)	136,973,679	145,730,474	157,527,392
(12) Funding Value / MV	99.41%	95.05%	95.65%
(13) Net Return on Funding Value	5.93%	8.51%	9.90%
(14) Net Return on Market Value	10.33%	13.44%	9.13%

SECTION B

DISCLOSURES AND SUPPLEMENTARY INFORMATION REQUIRED BY STATEMENTS NO. 25 AND NO. 27 OF THE GOVERNMENTAL ACCOUNTING STANDARDS BOARD

The information in this Section is presented in draft form for review by the City's auditor. Please let us know if there are any items that the auditor changes so that we may maintain consistency with the City's financial statements.

REQUIRED SUPPLEMENTARY INFORMATION

ANALYSIS OF FUNDING PROGRESS

Actuarial Valuation Date	(1) Actuarial Value of Assets	(2) Actuarial Accrued Liability (AAL)	(3) Percent Funded (1)/(2)	(4) Unfunded AAL (2) - (1)	(5) Payroll**	(6) Unfunded AAL as a Percentage of Covered Payroll (4)/(5)
8/31/97	101,475,648	91,022,617	111.5 %	(10,453,031)	20,908,549	(50.0)%
8/31/98	109,213,474	94,847,667	115.1 %	(14,365,807)	21,860,493	(65.7)%
8/31/99	113,902,477	104,691,766	108.8 %	(9,210,711)	23,611,284	(39.0)%
8/31/00	121,404,314	115,671,249	105.0 %	(5,733,065)	25,808,088	(22.2)%
8/31/01	128,069,831	122,660,542	104.4 %	(5,409,289)	28,215,685	(19.2)%
8/31/02	128,319,145	130,875,473	98.0 %	2,556,328	26,606,881	9.6 %
8/31/03	132,577,506	137,507,824	96.4 %	4,930,318	27,415,330	18.0 %
8/31/04	136,973,679	144,178,758	95.0 %	7,205,079	28,124,862	25.6 %
8/31/05	145,730,474	151,978,408	95.9 %	6,247,934	29,029,309	21.5 %
8/31/06	157,527,392	161,583,285	97.5 %	4,055,893	30,724,333	13.2 %

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Beginning Sept. 1	Actuarial Valuation Date	Annual Required Contribution*
1998	8/31/97	961,584
1999	8/31/98	91,814
2000	8/31/99	820,610
2001	8/31/00	1,877,926
2002	8/31/01	2,233,836
2003	8/31/02	3,297,577
2004	8/31/03	3,684,264
2005	8/31/04	4,077,037
2006	8/31/05	4,056,195
2007	8/31/06	4,076,536

* Annual required contribution is equal to the contribution percent times the valuation payroll (item (5)) projected to the appropriate fiscal year. The current projection factor is based on pay increases of 4.5% per year. The employer contribution rate as of 8/31/02 & beyond is based on a 10 year amortization of the UAAL.

** Non-DROP payroll in 2002 and later.

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the date indicated. Additional information as of the latest actuarial valuation follows:

Valuation date:	August 31, 2006
Actuarial cost method:	Entry Age
Amortization method:	10 years, level percent, open
Asset valuation method:	4 year smoothed market
Actuarial assumptions:	
Investment rate of return:	7.50%
Projected salary increases*:	4.5% - 8.5%
*Includes wage inflation at:	4.50%
Cost-of-living adjustments:	none

Membership data as of August 31, 2006 is provided on the following page and in Section D of this report.

MEMBERSHIP DATA - AUGUST 31, 2006

Active Members (Not Participating in DROP)

Tabulated by Valuation Divisions

Valuation Division	No.	Employee Contribution Percentage	Annual Payroll	Average Age	Average Service	Average Pay
Police						
- Old Plan	2	7.6	\$ 113,793	37.8	13.5	\$56,897
- Plan A	217	8.0	11,170,249	35.0	9.6	51,476
- Plan B	46	7.6	2,751,290	42.7	17.1	59,811
- Plan C	26	7.0	1,686,491	53.7	31.5	64,865
Fire						
- Plan A	158	8.0	8,142,458	36.2	7.6	51,535
- Plan B	109	7.6	6,860,052	47.1	20.6	62,936
Total	558	7.9	\$30,724,333	39.2	12.8	\$55,062

DROP Members

Number	Annual Benefit
55	\$1,758,566

The annual additions to DROP account shown above do not include annuity withdrawal payments

Retirants and Beneficiaries

Tabulated by Type of Benefit

Age & Service		Disability		Survivor Beneficiaries		Total	
No.	Annual Benefit	No.	Annual Benefit	No.	Annual Benefit	No.	Annual Benefit
261	\$4,214,973	36	\$494,687	43	\$420,978	340	\$5,130,638

Deferred Vested Members

No.	Estimated Annual Benefit
25	\$222,583

DEVELOPMENT OF ANNUAL PENSION COST AND NET PENSION OBLIGATION

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
		ARC			Pension	Actual Reported	Change in	NPO
Fiscal year		(Annual Required	Interest on	ARC	Cost	Employer	NPO	Balance
<u>Beginning</u>	<u>Ending</u>	<u>Contribution)</u>	<u>NPO</u>	<u>Adjustment</u>	<u>(C)+(D)-(E)</u>	<u>Contribution</u>	<u>(F)-(G)</u>	<u>Sum of col (H)</u>
9/1/1993	8/31/1994	\$ 580,796			\$ 580,796	\$ 388,813	\$ 191,983	\$ 191,983
9/1/1994	8/31/1995	-	\$ 13,439	\$ 19,801	(6,362)	400,022	(406,384)	(214,401)
9/1/1995	8/31/1996	695,015	(15,008)	(24,103)	704,110	419,583	284,527	70,126
9/1/1996	8/31/1997	545,702	4,909	8,680	541,931	430,884	111,047	181,173
9/1/1997	8/31/1998	530,891	12,682	24,997	518,576	491,945	26,631	207,804
9/1/1998	8/31/1999	961,584	14,546	32,467	943,663	908,234	35,429	243,233
9/1/1999	8/31/2000	91,814	17,026	43,928	64,912	941,282	(876,370)	(633,137)
9/1/2000	8/31/2001	820,610	(44,320)	(137,510)	913,800	1,111,434	(197,634)	(830,771)
9/1/2001	8/31/2002	1,877,926	(62,308)	(180,434)	1,996,052	1,541,649	454,403	(376,368)
9/1/2002	8/31/2003	2,233,836	(28,228)	(81,743)	2,287,351	1,780,604	506,747	130,379
9/1/2003	8/31/2004	3,297,577	9,778	15,300	3,292,055	1,991,672	1,300,383	1,430,762
9/1/2004	8/31/2005	3,684,264	107,307	167,903	3,623,668	2,562,850	1,060,818	2,491,580
9/1/2005	8/31/2006	4,077,037	186,869	292,392	3,971,514	2,892,711	1,078,803	3,570,383

SECTION C

VALUATION ANALYSIS, COMMENTS AND DROP PROVISIONS

DERIVATION OF ACTUARIAL GAIN (LOSS) YEAR ENDED AUGUST 31, 2006

The actuarial gains or losses realized in the operation of the Pension Fund provide an experience test. Gains and losses are expected to cancel each other over a period of years (in the absence of double-digit inflation) and sizable year to year fluctuations are common. Detail on the derivation of the actuarial gain (loss) is shown below, along with a year by year comparative schedule.

(1) UAAL* last valuation	\$6,247,934
(2) Total normal cost	5,717,798
(3) Actual employer and employee contributions	4,978,300
(4) Interest accrual at 7.5%	496,326
(5) Expected UAAL before changes (1) + (2) - (3) + (4)	7,483,758
(6) Increase from benefit changes	0
(7) Increase from revised actuarial assumptions and methods	0
(8) Expected UAAL after changes	7,483,758
(9) Actual UAAL this valuation	4,055,893
(10) Gain (loss) (8) - (9)	3,427,865
(11) Gain (loss) as percent of actuarial accrued liabilities at start of year (\$151,978,408).	2.3%

Valuation Date	Actuarial Gain (Loss) As % of Beginning Accrued Liabilities
Aug. 31, 1997	(0.5)%
Aug. 31, 1998	5.9 %
Aug. 31, 1999	(10.9)%
Aug. 31, 2000	(1.9)%
Aug. 31, 2001	1.3 %
Aug. 31, 2002	(5.3)%
Aug. 31, 2003	(0.5)%
Aug. 31, 2004	(0.3)%
Aug. 31, 2005	1.7 %
Aug. 31, 2006	2.3 %

ACTUARIAL ACCRUED LIABILITIES & VALUATION ASSETS COMPARATIVE STATEMENT (\$ AMOUNTS IN THOUSANDS)

Valuation Date	Accrued Liability (AAL)	Valuation Assets	Unfunded Actuarial Accrued Liability(UAAL)	Actuarial Valuation Assets To AAL	Ratio of UAAL to Valuation Payroll
Dec. 31, 1983#	\$ 31,113	\$ 29,718	\$ 1,395	96 %	13 %
Dec. 31, 1984	33,651	34,318	(667)	102 %	-
Dec. 31, 1985	37,083	39,895	(2,812)	108 %	-
Dec. 31, 1986	41,016	44,671	(3,655)	109 %	-
Dec. 31, 1987	46,239	50,417	(4,178)	109 %	-
Dec. 31, 1988	50,820	55,693	(4,873)	110 %	-
Dec. 31, 1989	54,676	61,144	(6,468)	112 %	-
Dec. 31, 1990#@	55,127	66,511	(11,384)	121 %	-
Aug. 31, 1991#	59,149	68,390	(9,241)	116 %	-
Aug. 31, 1992@	63,407	77,980	(14,573)	123 %	-
Aug. 31, 1993	67,910	86,583	(18,673)	127 %	-
Aug. 31, 1994	70,517	83,308	(12,791)	118 %	-
Aug. 31, 1995#	79,202	92,235	(13,033)	116 %	-
Aug. 31, 1996	81,583	94,348	(12,765)	116 %	-
Aug. 31, 1997*	91,023	101,476	(10,453)	111 %	-
Aug. 31, 1998	94,848	109,213	(14,365)	115 %	-
Aug. 31, 1999#@	104,692	113,902	(9,210)	109 %	-
Aug. 31, 2000	115,671	121,404	(5,733)	105 %	-
Aug. 31, 2001	122,661	128,070	(5,409)	104 %	-
Aug. 31, 2002#@	130,875	128,319	2,556	98 %	10 %
Aug. 31, 2003	137,508	132,578	4,930	96 %	18 %
Aug. 31, 2004	144,179	136,974	7,205	95 %	26 %
Aug. 31, 2005	151,978	145,730	6,248	96 %	22 %
Aug. 31, 2006	161,583	157,527	4,056	97 %	13 %

After changes in benefit provisions

@ After changes in actuarial assumptions or methods

* After inclusion of "old" plan

Two tests of funding progress based on the relationship between valuation assets and actuarial accrued liabilities are shown above. These tests are, however, dependent upon the actuarial cost method.

The Ratio of Valuation Assets to Actuarial Accrued Liabilities is a traditional measure of a system's funding progress. Except in years when the benefit provisions are amended or actuarial assumptions are revised, the ratio can be expected to gradually tend toward 100%, assuming computed contribution amounts are received by the plan.

The Ratio of Unfunded Actuarial Accrued Liabilities to Valuation Payroll is another relative index of condition. In an inflationary economy, the value of dollars is decreasing. This environment results in employee pays increasing in dollar amounts, retirement benefits increasing in dollar amounts, and then, unfunded actuarial accrued liabilities increasing in dollar amounts - all at a time when the actual substance of these items may be decreasing. When looking at dollar amounts, the effects of inflation can hide the actual funding progress from year to year. Unfunded actuarial accrued liabilities dollars divided by active employee payroll dollars provides an index which attempts to eliminate the misleading effects of inflation. The smaller the ratio of unfunded liabilities to active member payroll, the stronger the system. Observation of this relative index over a period of years will give an indication of whether the system is becoming financially stronger or weaker.

COMMENTS

Cost-of-Living Adjustments

Effective October 1992 the Pension Fund Ordinance provides for cost-of-living (COLA) benefits to pensioners. The source of funding for the COLA benefits is not guaranteed. The City has indicated that the payment of COLA is not guaranteed and has chosen not to pre-fund this benefit. Therefore, COLA benefits and the corresponding pool of assets were not included in this valuation of the Pension Fund or in the determination of the employer contribution. If both the benefit and the assets were included in the valuation, the resulting employer contribution would be higher than the figures reported herein. The plan's auditor should review this matter for compliance with GASB Statement No. 25.

Experience During Year

The aggregate experience of the System was favorable during the year ended August 31, 2006. During this period, the Pension Fund earned more than the long-term assumed rate of investment return (7.5% net of expenses). Market smoothing techniques used for your actuarial valuations recognize only part of the current and prior investment gains and losses. Investment experience (including gains and losses from prior years) was more favorable than expected, resulting in an investment gain.

Employer Contributions

The employer contributions to the System during the 2005-2006 plan year were lower than recommended. In general, reduced contributions during a given year automatically increase the amount of future employer contributions. During 2006, the City modified the ordinance such that City contributions to the Pension Fund will equal the City's computed normal cost contribution. If the City follows this policy literally, and does not make contributions for unfunded liabilities, the policy will have an adverse effect on the Pension Fund. It would also likely lead to an ever increasing Net Pension Obligation in accordance with GASB Statement No. 27.

COMMENTS

Plan Changes

There were no benefit changes reported to the actuary in connection with the August 31, 2006 valuation of the Pension Fund.

Other

The contribution requirements shown on page A-3 and throughout this report were based on a ten-year amortization (open) of past service liabilities based on the current policy. For consistency with prior reports, employer contribution rates were also developed using both 5 and 25-year amortization periods. These rates are shown below:

Employer Contribution Rates Expressed as %'s of Payroll Under Alternate Amortization Periods	
For Fiscal Year Beginning September 1,	2007
5 YEAR AMORTIZATION OF UAAL	13.38 %
25 YEAR AMORTIZATION OF UAAL	11.42 %

Note: Contribution rates are expressed as percentages of active member payroll. This payroll does not include pay for active members participating in the DROP.

SECTION D

SUMMARY OF BENEFIT PROVISIONS AND VALUATION DATA SUBMITTED BY THE PENSION FUND

SUMMARY OF BENEFIT PROVISIONS EVALUATED OR CONSIDERED (AUGUST 31, 2006)

Normal Retirement

Eligibility.

Plan A: Attained age 50.

Others: Attained age 53.

Amount.

Plan A members: Member receives a pension equal to 2.56% of regular pay times years of service up to 25 years. (Maximum pension is 64% of regular pay).

Others: 1) A member with 21 or more years of service shall receive a pension equal to 58% (Plan B) or 54% (Plan C) of regular pay, plus 2% of regular pay for each year of service rendered after becoming eligible for retirement, to a maximum increase of 10% of regular pay.

2) A member with less than 21 years service shall receive a pension equal to 58% (Plan B) or 54% (Plan C) of regular pay times the ratio of a) his number of years of service, to b) 21 years.

Minimum annual benefit is \$3,600 (not applicable to children recipients).

Regular Pay

The average base pay of a member during the 26 consecutive pay periods preceding retirement or death.

Early Retirement

Eligibility. Attained age 50 and 21 years of service.

Plan A members: Member receives a pension equal to 2.56% of regular pay times the ratio of years of service up to 25 years.

Others: 1) A member with 21 or more years of service shall receive a pension equal to 52% (Plan B) or 48% (Plan C) of regular pay, plus 2% of regular pay for each year of service rendered after becoming eligible for early retirement, to a maximum of 6%.

2) A member with less than 21 years of service shall receive a pension equal to 58% (Plan B) or 54% (Plan C) of regular pay times that ratio of (a) his number of years of service, to (b) 21 years.

SUMMARY OF BENEFIT PROVISIONS EVALUATED OR CONSIDERED

Vested (Deferred) Retirement

Eligibility. Termination of employment after 10 or more years of service. Benefit commences at age 53 (age 50 for Plan A members), actuarially reduced benefit available at age 50.

Amount.

Plan A members: A pension equal to 2.56% of regular pay times years of service up to 25 years.

Others: A pension equal to 54% or 58% of regular pay at termination times the ratio of the number of years of service divided by 21 years (ratio shall not exceed one).

A member terminating employment prior to age 50 and after 10 or more years of service has the option to withdraw his accumulated contributions and receive a reduced pension at age 53 (reduced to reflect withdrawal of contributions).

Duty Death or Duty Disability Resulting In Death

Eligibility. Active member dies in the line of duty or as a result of injuries received while in the line of duty.

Amount. (1) If a member dies prior to becoming eligible for a normal retirement, the member's surviving spouse receives a pension equal to 54% or 58% of his regular pay. Upon the spouse's remarriage or death, the pension is payable to any dependent children until 19 years of age.

(2) If a member dies after becoming eligible for a normal retirement, his designated beneficiary receives a pension equal to Option A (joint and 100% survivor actuarial equivalent benefit) which would have been payable had the deceased member retired and elected Option A.

The above amounts are subject to deduction of the amount received from worker's compensation.

Non-Duty Death

Eligibility. Attained age 50 and 21 years of service.

Amount. A designated beneficiary shall receive a pension equal to the pension which would have been payable had the member retired the day prior to his death and elected Option A, except that the early retirement actuarial reduction shall not be applied.

DROP PROGRAM SUMMARY OF PROVISIONS

DROP: Deferred Retirement Option Plan

Eligibility for the DROP

- Members of Plans B and C may join the DROP within 1 year of becoming eligible for Normal retirement benefits as described in the Summary of benefit provisions in this report
- Grandfather provision allows members of Plans B and C who were eligible to retire on the date of DROP implementation, a one time opportunity to join the DROP.
- Members of Plan A may join the DROP at any time after meeting the eligibility conditions for Normal retirement as described in the Summary of benefit provisions in this report

DROP benefits

- 100% of the member's accrued benefit at the time of DROP will be contributed to the member's DROP account.
- If the member elects annuity withdrawal (available to members of Plans B and C) the lump sum payment and corresponding reduced annuity will be credited to the member's DROP account.

DROP funding Period

- Both the City and the employee will contribute (in accordance with the provisions of each Plan) to the System until the employee enters the DROP.

DROP Period

- Maximum of 5 years.

The rates of retirement /DROP are shown in Section E of this report.

SUMMARY OF BENEFIT PROVISIONS EVALUATED OR CONSIDERED

Duty Disability

Eligibility. An active member becomes totally and permanently disabled from performing their duty resulting from a cause occurring while in the line of duty.

Amount. Plan A: 58% of regular pay.

Plans B & C: A pension equal to 54% or 58% of regular pay respectively, plus 2% of regular pay for each year of service rendered after becoming eligible for retirement, to a maximum increase of 10% of regular pay. Such pension shall continue after the member's death to the member's surviving spouse, minor children or designated Option A beneficiary (a reduced amount in this case).

The above amounts are subject to deduction of the amount received from worker's compensation.

Non-Duty Disability

Eligibility. An active member becomes totally and permanently disabled while not in the line of duty.

Amount. A pension equal to the following percent of regular pay:

- (i) 21% or 23%; if 5 or more, but less than 10 years of service
- (ii) 36% or 39%; if 10 or more, but less than 15 years of service
- (iii) 49% or 53%; if 15 or more years of service.

(Plans A & B are eligible for higher amounts. Plan C is eligible for lower amount.)

If death results from such disability, the pension shall be paid to the member's surviving spouse until the spouse's death or remarriage, or a reduced pension will be paid to a designated beneficiary.

Death After Retirement

Plan A members receive a death benefit after retirement equal to the member's accumulated contributions multiplied by the ratio of the number of expected payments **not** received to the number of expected payments (the ratio cannot be less than zero)*.

Employee Contributions

Plan A members: 8% of pay

Plan B members: 7.6% of pay

Plan C members: 7.0% of pay

Upon attaining 21 years of service member contributions are discontinued for Plan B and Plan C members. Plan C members are eligible for the lower benefit formula.

RETIRANTS AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS

COMPARATIVE STATEMENT

Year Ended	Added to Rols			Removed from Rols		Rols End of Year		% Incr.	Average	Expected Removals
	No.**	Annual Benefits	Post-Ret. Increases	No.	Annual Benefits	No.	Annual Benefits	Annual Benefits	Annual Benefit	
Dec. 31, 1980	3	\$ 19,286	\$31,587	2	\$ 7,805	72	\$ 336,306	3.5%	\$ 4,671	*
Dec. 31, 1981	7	42,675		3	7,427	76	403,141	19.9%	5,304	2.0
Dec. 31, 1982	8	84,321		2	9,043	82	478,419	18.7%	5,834	2.0
Dec. 31, 1983	3	21,512		4	17,233	81	482,698	0.9%	5,959	2.2
Dec. 31, 1984	6	75,732		1	3,600	86	554,830	14.9%	6,452	2.1
Dec. 31, 1985	12	102,224		6	26,240	92	630,814	13.7%	6,857	2.1
Dec. 31, 1986	8	89,719		2	4,810	98	715,723	13.5%	7,303	2.2
Dec. 31, 1987	12	123,986		4	21,530	106	818,178	14.3%	7,719	2.4
Dec. 31, 1988	6	109,203		2	11,578	110	915,803	11.9%	8,325	2.5
Dec. 31, 1989	7	114,257		3	10,800	114	1,019,260	11.3%	8,941	2.6
Dec. 31, 1990	11	116,420	42,470	3	19,220	122	1,116,460	9.5%	9,151	2.6
Aug. 31, 1991	22 #	308,940		2	7,200	142	1,460,670	30.8%	10,286	2.9
Aug. 31, 1992	16	221,944		1	3,816	157	1,678,798	14.9%	10,693	3.0
Aug. 31, 1993	17	219,974		1	10,698	173	1,888,074	12.5%	10,914	3.4
Aug. 31, 1994	16	218,777		4	17,829	185	2,089,022	10.6%	11,292	3.9
Aug. 31, 1995	16	211,219		4	37,158	197	2,263,083	8.3%	11,488	4.0
Aug. 31, 1996	8	149,099		2	16,566	203	2,395,616	5.9%	11,801	4.4
Aug. 31, 1997	73 ##	590,041		4	56,890	272	3,042,547	27.0%	11,186	4.8
Aug. 31, 1998	10	155,262		11	71,670	271	3,126,139	2.7%	11,536	9.5
Aug. 31, 1999	23	414,130		1	22,889	293	3,517,380	12.5%	12,005	9.1
Aug. 31, 2000	17	335,244		7	62,014	303	3,790,610	7.8%	12,510	9.3
Aug. 31, 2001	14	225,737		16	105,022	301	3,911,325	3.2%	12,994	9.3
Aug. 31, 2002	18	278,160		14	115,340	305	4,074,145	4.2%	13,358	9.1
Aug. 31, 2003	15	219,569		11	119,499	309	4,174,215	2.5%	13,509	9.1
Aug. 31, 2004	12	175,551		5	74,835	316	4,274,931	2.4%	13,528	9.4
Aug. 31, 2005	30	702,721		12	73,072	334	4,904,580	14.7%	14,684	9.5
Aug. 31, 2006	10	262,420		4	36,362	340	5,130,638	4.6%	15,090	10.3

* Not available

Includes one member not previously reported

** Includes retirements from the DROP

Includes the addition of "old plan" members

DROP MEMBERS - BY ATTAINED AGES
AUGUST 31, 2006

Attained Ages	No.	DROP Annual Benefits
50	1	\$ 46,887
51	1	35,777
52	4	141,368
53	4	133,950
54	10	332,780
55	6	180,683
56	5	127,542
57	4	114,727
58	1	32,832
59	4	128,173
60	3	96,811
61	4	120,309
62	4	132,952
63	1	33,756
65+	3	100,019
Total	55	\$1,758,566

RETIRANTS AND BENEFICIARIES - BY ATTAINED AGES
AUGUST 31, 2006

Attained Ages	Age and Service Retirants		Disability Retirants		Survivor Beneficiaries	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 50			9	\$182,379		
51	3	\$ 46,789	1	14,074		
52	6	108,330			1	\$14,665
53	6	88,209	3	38,979		
54	6	178,420	1	14,205	1	8,486
55	8	126,096			1	15,127
56	13	265,406	1	14,065	1	36,023
57	13	229,281			1	20,833
58	11	236,956	1	13,280	2	56,817
59	15	185,389	1	13,063		
60	6	113,165				
61	15	250,140	1	4,014		
62	7	111,259	2	24,383	1	12,029
63	14	247,102	3	30,520	1	4,014
64	11	197,337				

RETIRANTS AND BENEFICIARIES - BY ATTAINED AGES
AUGUST 31, 2006

Attained Ages	Age and Service Retirants		Disability Retirants		Survivor Beneficiaries	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
65	9	\$ 130,507	2	\$ 25,380		
66	15	253,804	2	29,871	1	\$ 14,294
67	13	191,145				
68	9	155,894			4	\$ 54,431
69	11	134,825	2	20,325	1	13,265
70	15	240,843			2	25,678
71	4	59,434	3	23,108		
72	6	93,098				
73	3	46,374				
74	4	60,235				
75	4	55,532	3	39,058		
76	6	78,283			2	17,564
77	3	57,981				
78	3	45,595	1	7,983		
79	7	74,422			1	4,868
80	1	16,078			2	17,880
81	6	56,912			3	12,921
82	2	35,250				
83					1	4,032
84					1	3,870
85 and over	6	44,882			16	84,181
Total	261	\$4,214,973	36	\$494,687	43	\$420,978

VESTED TERMINATED MEMBERS - BY ATTAINED AGES
AUGUST 31, 2006

Attained Ages	No.	Estimated Annual Benefits
37	3	\$ 34,014
39	1	3,195
40	2	4,631
42	2	15,656
43	4	18,253
44	1	2,073
45	1	4,775
46	3	29,129
47	2	33,805
48	2	52,703
49	1	9,405
52	1	7,796
53	1	4,617
54	1	2,531
Total	25	\$222,583

ACTIVE MEMBERS INCLUDED IN VALUATION

Valuation Date	Active Members	Vested Term. Members	Valuation Payroll**	Average			% Increase
				Age	Service	Pay	
Dec. 31, 1987	484	16	\$12,948,660	39.0	14.3	\$26,757	8.1 %
Dec. 31, 1988	483	19	12,937,333	39.5	14.7	26,785	0.1 %
Dec. 31, 1989	496	24	13,742,308	39.5	14.7	27,706	3.4 %
Dec. 31, 1990	510	30	15,014,896	39.6	14.7	29,441	6.3 %
Aug. 31, 1991	490	36	15,157,150	39.3	14.4	30,933	5.1 %
Aug. 31, 1992	471	37	15,364,976	40.0	15.0	32,622	5.5 %
Aug. 31, 1993	516	38	16,721,658	39.3	14.5	32,406	(0.7)%
Aug. 31, 1994	521	42	17,698,377	39.0	13.4	33,970	4.8 %
Aug. 31, 1995	526	41	18,561,302	39.1	14.5	35,288	3.9 %
Aug. 31, 1996	545	42	19,224,719	39.1	14.3	35,275	0.0 %
Aug. 31, 1997	549	43	20,908,549	38.9	13.3	38,085	8.0 %
Aug. 31, 1998	561	47	21,860,493	38.8	13.2	38,967	2.3 %
Aug. 31, 1999	545	48	23,611,284	39.1	13.5	43,323	11.2 %
Aug. 31, 2000	543	45	25,808,088	39.5	13.8	47,529	9.7 %
Aug. 31, 2001	584	41	28,215,685	39.3	13.3	48,315	1.7 %
Aug. 31, 2002	536	36	26,606,881	38.4	12.3	49,640	2.7 %
Aug. 31, 2003	535	31	27,415,330	38.7	12.5	51,244	3.2 %
Aug. 31, 2004	533	25	28,124,862	38.8	12.5	52,767	3.0 %
Aug. 31, 2005	533	25	29,029,309	39.1	12.9	54,464	3.2 %
Aug. 31, 2006	558	25	30,724,333	39.2	12.8	55,062	1.1 %

ADDITIONS TO AND REMOVALS FROM ACTIVE MEMBERSHIP ACTUAL AND EXPECTED NUMBERS

Year Ended	Number Added During Year		Normal Retirement*		Disability Retirement		Died-In-Service		Terminations		Active Members End of Year
	A	E	A	E	A	E	A	E	A	E	
Aug. 31, 1992	0	19	10	8.3	2	1.2	1	1.2	6	15.7	471
Aug. 31, 1993	63	18	12	8.2	2	1.2	0	1.2	4	13.0	516
Aug. 31, 1994	38	33	12	8.6	2	1.2	0	1.3	19	15.8	521
Aug. 31, 1995	26	21	12	7.9	0	1.3	0	1.3	9	17.8	526
Aug. 31, 1996	34	15	8	9.2	0	1.2	0	1.4	7	15.8	545
Aug. 31, 1997	31	27	20	8.3	0	1.4	0	1.4	7	16.6	549
Aug. 31, 1998	42	30	8	8.1	0	1.3	0	1.3	22	18.6	561
Aug. 31, 1999	23	39	19	9.4	1	1.3	0	1.3	19	16.8	545
Aug. 31, 2000	29	31	8	12.5	0	0.5	0	0.6	23	13.9	543
Aug. 31, 2001	61	20	6	14.3	3	0.6	0	0.6	11	14.0	584
Aug. 31, 2002	21	69	54	15.7	0	0.6	0	0.6	15	16.5	536
Aug. 31, 2003	21	22	13	11.1	0	0.5	0	0.5	9	15.3	535
Aug. 31, 2004	28	30	19	12.4	0	0.5	0	0.4	11	14.3	533
Aug. 31, 2005	24	24	9	12.7	2	0.5	0	0.4	13	14.6	533
Aug. 31, 2006	42	17	7	14.7	0	0.5	0	0.5	10	14.1	558
5 Year Total	136	162	102	66.5	2	2.6	0	2.4	58	74.8	

A Represents actual number E Represents expected number based on assumptions outlined in Section C

** Includes new retirements and DROP members (from active status) beginning with August 31, 2002 valuation*

*** Reflects Non-DROP payroll in 2002 and later*

ACTIVE POLICEMEN NOT PARTICIPATING IN DROP - AUGUST 31, 2006
BY ATTAINED AGE AND YEARS OF SERVICE

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
20-24	10							10	\$ 406,675
25-29	29	10						39	1,685,177
30-34	21	49	1					71	3,396,881
35-39	4	20	33	6				63	3,464,217
40-44	1	4	6	19	2			32	1,891,261
45-49			2	15	15	4		36	2,226,187
50-54		1		1	4	6	17	29	1,916,196
55-59					1		8	9	599,170
60							1	1	68,249
63							1	1	67,810
Totals	65	84	42	41	22	10	27	291	\$15,721,823

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 37.9 years
Service: 12.8 years
Annual Pay: \$54,027

ACTIVE FIREMEN NOT PARTICIPATING IN DROP - AUGUST 31, 2006
BY ATTAINED AGE AND YEARS OF SERVICE

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
20-24	3							3	\$ 119,666
25-29	17	6						23	1,009,199
30-34	25	24	7					56	2,767,318
35-39	6	13	14	4				37	2,056,251
40-44	1	11	12	27	1			52	3,035,732
45-49	2	5	8	13	14	5		47	2,830,165
50-54		1	2	7	8	18	6	42	2,673,888
55-59				1	1		5	7	510,291
Totals	54	60	43	52	24	23	11	267	\$15,002,510

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 40.6 years
Service: 12.9 years
Annual Pay: \$56,189

FINANCIAL INFORMATION FURNISHED FOR THE ACTUARIAL VALUATION

Reported Market Value of Assets* for the Year Ended August 31, 2006

Market Value of Assets, Beginning of Year	\$164,343,828
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REVENUES

Contributions From		
Members	\$2,085,589	
Employer	2,686,227	
EMS	206,484	
Total Contributions		4,978,300

Other Income		
12(B)1 Rebates		65,394

Investment Income		
Net Interest	716,800	
Net Dividends	2,627,683	
Amortization of premiums and discounts	(3,381)	
Net Gain on Investments	14,772,435	
Other	285,341	
Total Investment Income		<u>\$ 18,398,878</u>

Total Revenues	\$ 23,442,572
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EXPENDITURES

Retirement Benefits Paid		
Base Pension		\$ 5,279,760
DROP Payments		2,547,208

Refunds of Member Contributions		
Trustee-to-trustee transfer	\$ 55,059	
Direct refund to employee	28,889	
Total Refunds		\$ 83,948

Administrative Expenses	283,402
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Investment Expense	213,725
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Change in Payables	<u>12,896</u>
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Total Expenditures	\$ 8,420,939
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Market Value of Assets, End of Year	\$ 179,365,461
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* Includes COLA pool assets of \$14,668,843

SECTION E

**FINANCIAL PRINCIPLES,
ACTUARIAL VALUATION PROCESS,
ACTUARIAL COST METHODS,
ACTUARIAL ASSUMPTIONS, AND
DEFINITIONS OF TECHNICAL TERMS**

BASIC FINANCIAL PRINCIPLES AND OPERATION OF THE PENSION FUND

Benefit Promises Made Which Must Be Paid For. A retirement program is an orderly means of handing out, keeping track of, and financing pension promises to a group of employees. As each member of the retirement program acquires a unit of service credit the member is, in effect, handed an "IOU" which reads: "The Pension Fund promises to pay you one unit of retirement benefits, payments in cash commencing when you retire."

The principal related financial question is: When shall the money required to cover the "IOU" be contributed? This year, when the benefit of the member's service is received? Or, some future year when the "IOU" becomes a cash demand?

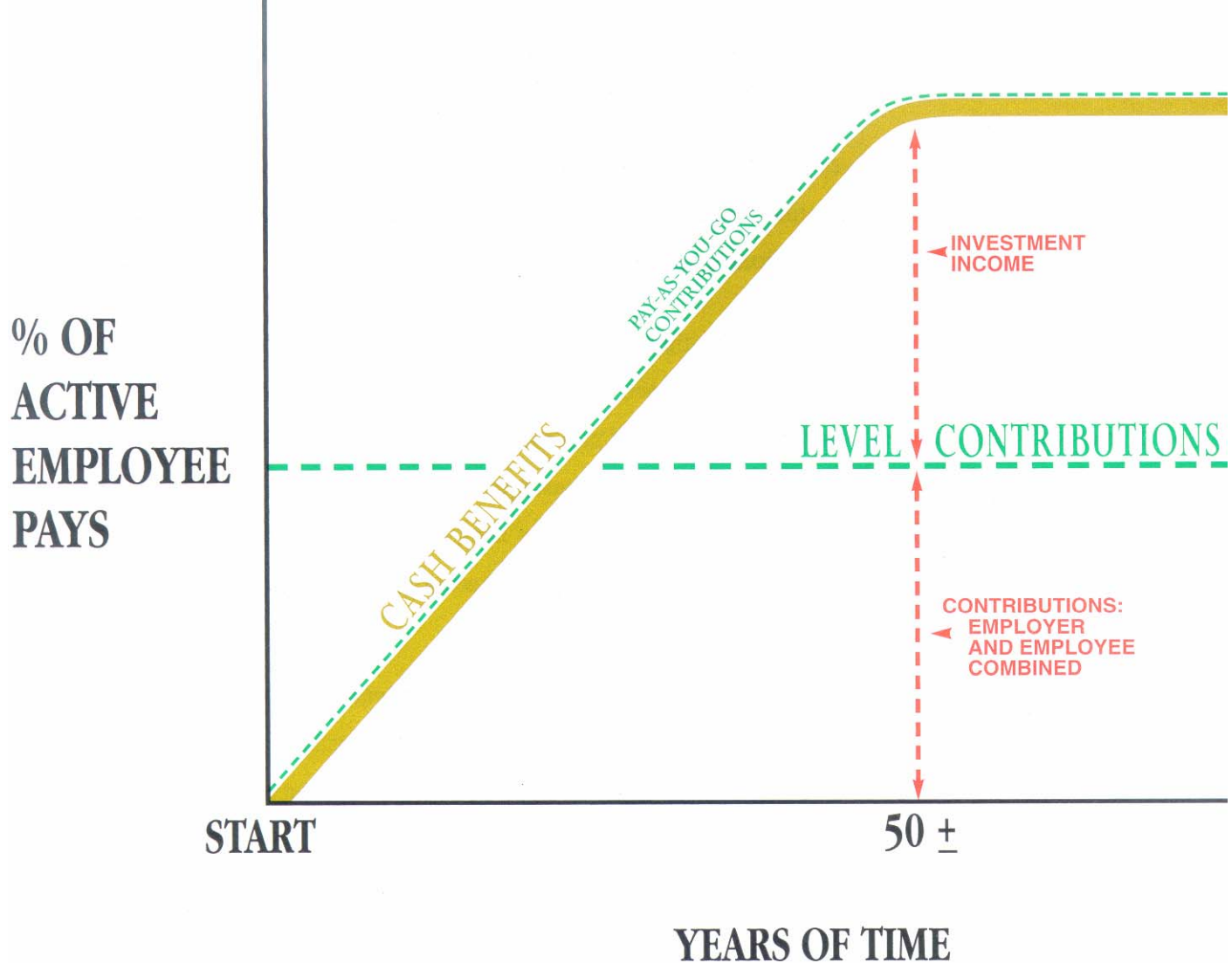
This Pension Fund addresses this question by having as its ***financial objective the establishment and receipt of contributions, expressed as percents of active member payroll, which will remain approximately level*** from year to year and will not have to be increased for future generations of taxpayers.

Translated into actuarial terminology, a level percent-of-payroll contribution objective means that the contribution rate must be at least:

Normal Cost (the present value of future benefits assigned to members' service being rendered in the current year)

. . . plus . . .

Interest on the Unfunded Actuarial Accrued Liability (the difference between the actuarial accrued liability and current system assets).



CASH BENEFITS LINE. This relentlessly increasing line is the fundamental reality of retirement plan financing. It happens each time a new benefit is added for future retirements (and happens regardless of the design for contributing for benefits).

LEVEL CONTRIBUTION LINE. Determining the level contribution line requires detailed assumptions concerning a variety of experiences in future decades, including:

Economic Risk Areas

- Rates of investment return
- Rates of pay increase
- Changes in active member group size

Non-Economic Risk Areas

- Ages at actual retirement
- Rates of mortality
- Rates of withdrawal of active members (turnover)
- Rates of disability

THE ACTUARIAL VALUATION PROCESS

The financing diagram on the previous page shows the relationship between the two fundamentally different philosophies of paying for retirement benefits: the method where contributions match cash benefit payments (or barely exceed cash benefit payments, as in the Federal Social Security program) which is an *increasing contribution method*; and the *level contribution method* which equalizes contributions between the generations.

The actuarial valuation is the mathematical process by which the level contribution rate is determined, and the flow of activity constituting the valuation may be summarized as follows:

A. *Covered Person Data*, furnished by plan administrator.

Retired lives now receiving benefits

Former employees with vested benefits not yet payable

Active employees

B. + *Asset data* (cash & investments), furnished by plan administrator

C. + *Assumptions concerning future financial experience in various risk areas*, which assumptions are established by the City Council after consulting with the actuary

D. + *The funding method* for employer contributions (the long-term, planned pattern for employer contributions)

E. + *Mathematically combining the assumptions, the funding method, and the data*

F. = **Determination of:**

Plan financial position

and/or New Employer Contribution Rate

ACTUARIAL COST METHODS USED FOR THE VALUATION

Normal cost and the allocation of actuarial present values between service rendered before and after the valuation date were determined using an individual entry-age actuarial cost method having the following characteristics:

- (i) the annual normal costs for each individual active member, payable from the member's actual date of employment to projected date of DROP or retirement, are sufficient to accumulate the actuarial present value of the member's benefit at the time of retirement;
- (ii) each annual normal cost is a constant percentage of the member's year by year projected covered pay.

Amortization of Unfunded Actuarial Accrued Liabilities. Unfunded actuarial accrued liabilities were amortized as a level percent of active member payroll over a period of 10 years. Active member payroll was assumed to increase 4.5% a year for the purpose of determining the level percent contributions (please refer to the comments in Section C for important additional information).

ACTUARIAL ASSUMPTIONS IN THE VALUATION PROCESS

The actuary calculates contribution requirements and actuarial present values for a retirement plan by applying actuarial assumptions to the benefit provisions and people information of the plan, using the actuarial cost methods described on page E-4.

The principal areas of risk which require assumptions about future experience are:

- (i) long-term rates of investment return to be generated by the assets of the plan
- (ii) patterns of pay increases to members
- (iii) rates of mortality among members, retirants and beneficiaries
- (iv) rates of withdrawal of active members
- (v) rates of disability among active members
- (vi) the age patterns of actual retirements.

In making a valuation, the actuary calculates the monetary effect of each assumption for as long as a present covered person survives - - - a period of time which can be as long as a century.

The employer contribution rate has been computed to remain level from year to year so long as benefits and the basic experience and make-up of members do not change. Examples of favorable experience which would tend to reduce the employer contribution rate are:

- (1) Investment returns in excess of 7.5 percent per year.
- (2) Member non-vested terminations at a higher rate than outlined on page E-9.
- (3) Mortality among retirants and beneficiaries at a higher rate than indicated by the 1971 Group Annuity Mortality Table projected to the year 2000, setback 0 years for men and 5 years for women.
- (4) Increases in the number of active members.

Examples of unfavorable experience which would tend to increase the employer contribution rate are:

- (1) Pay increases in excess of the rates outlined on page E-7.
- (2) An increase in the rates of retirement (DROP) over the rates outlined on page E-10.
- (3) A pattern of hiring employees at older ages than in the past.

Actual experience of the plan will not coincide exactly with assumed experience, regardless of the choice of the assumptions, the skill of the actuary or the precision of the calculations. Each valuation provides a complete recalculation of assumed future experience and takes into account all past differences between assumed and actual experience. The result is a continual series of adjustments (usually small) to the computed contribution rate.

From time to time one or more of the assumptions is modified to reflect experience trends (but not random or temporary year to year fluctuations).

Investment Return (net of administrative expenses).

7.5% a year, compounded annually. This rate consists of a real rate of return of 3.0% a year plus a long-term rate of wage inflation of 4.5% a year.

This assumption is used to equate the value of payments due at different points in time. Approximate rates of investment return, for the purpose of comparisons with assumed rates, are shown below. Actual increases in average active member pay are also shown for comparative purposes.

	Year Ended August 31,				
	2006	2005	2004	2003	2002
Rate of Investment Return	9.9 %	8.5 %	5.9 %	5.8 %	4.1 %
Increase in Average Pay	1.1 %	3.2 %	3.0 %	3.2 %	2.7 %

The nominal rate of return was computed using the approximate formula $i = I$ divided by $1/2 (A + B - I)$, where I is recognized investment income net of expenses and COLA Pool appropriation, A is the beginning of year asset value, and B is the end of year asset value.

These rates of return should not be used for measurement of an investment advisor's performance or for comparisons with other systems -- *to do so will mislead*.

Pay Projections. These assumptions are used to project current pays to those upon which benefits will be based. The assumptions were first used for the August 31, 2002 valuation.

Sample Ages	Annual Rate of Pay Increase for Sample		
	Base (Economic	Merit and Longevity	Total
20	4.5%	4.0%	8.5%
25	4.5%	3.3%	7.8%
30	4.5%	2.8%	7.3%
35	4.5%	2.5%	7.0%
40	4.5%	2.2%	6.7%
45	4.5%	1.8%	6.3%
50	4.5%	1.2%	5.7%
55	4.5%	0.7%	5.2%

Pay Projections continued

If the number of active members remains constant, the total active member payroll is eventually expected to increase by 4.5% annually, the base portion of the individual pay increase assumptions. This increasing payroll was recognized in amortizing unfunded actuarial accrued liabilities. Please refer to page C-4 for important additional information.

Changes in average pay and total payroll actually experienced is shown below. After 2002, payroll is non-DROP payroll.

Increase in	Year Ended August 31,				
	2006	2005	2004	2003	2002
Average pay	1.1 %	3.2 %	3.0 %	3.2 %	2.7 %
Total payroll	5.8 %	3.2 %	2.6 %	3.0 %	(5.7)%

Mortality Table. The 1971 Group Annuity Mortality Table projected to the year 2000, set back 0 years for men and 6 years for women. This table was first used for the August 31, 1999 valuation. Sample values follow:

Sample Ages	Actuarial Present Value of \$1 Monthly for Life		Future Life Expectancy (Years)	
	Men	Women	Men	Women
55	\$127.55	\$137.82	23.98	29.17
60	116.92	129.43	19.90	24.82
65	104.30	119.21	16.09	20.70
70	90.39	106.97	12.69	16.82
75	76.40	93.20	9.82	13.32
80	62.33	79.24	7.39	10.36

This assumption is used to measure the probabilities of each benefit payment being made after retirement. Fifty percent of the mortality rates of this table were used to determine the probability of members dying before retirement. Effective with the 8/31/97 valuation 50% of the assumed deaths before retirement were assumed to be duty related and 50% were assumed to be non-duty related.

Rates of separation from active membership. The rates do not apply to members eligible to retire and do not include separation on account of death or disability. This assumption measures the probabilities of members remaining in employment.

Sample Ages	Years of Service	Percent Separating within Next Year	
		Police	Fire
ALL	0	15.00%	8.00%
	1	10.00%	6.00%
	2	8.00%	4.50%
	3	7.00%	3.00%
	4	6.00%	2.00%
25	5 & Over	5.00%	2.00%
30		5.00%	1.40%
35		3.80%	1.00%
40		2.40%	0.80%
45		1.30%	0.60%
50		0.50%	0.10%
55		0.50%	0.10%

The rates were first used for the August 31, 1999 valuation.

Rates of Disability. These assumptions represent the probabilities of active members becoming disabled.

Sample Ages	Percent Becoming Disabled within Next Year	
	Men	Women
20	0.04%	0.04%
25	0.05%	0.05%
30	0.05%	0.05%
35	0.08%	0.08%
40	0.12%	0.12%
45	0.19%	0.19%
50	0.34%	0.34%
55	0.50%	0.50%
60	0.67%	0.67%

The mortality table was set forward ten years for projecting disability costs.

These rates were first used for the August 31, 1999 valuation.

Effective with the August 31, 1997 valuation, 50% of the assumed liabilities were assumed to be duty related and 50% were assumed to be non-duty related.

Rates of Retirement and DROP Entry. These rates are used to measure the probabilities of an eligible member retiring and/or “dropping” within 1 year of the indicated age.

Ages	Rates of Retirement and/or DROP Entry				
	Old Plan	Plan A		Plans B & C	
		Police	Fire	Police	Fire
50	35%	45%	15%	35%	5%
51	15	25	15	15	5
52	15	25	15	15	5
53	15	20	10	30	20
54	15	20	20	30	20
55	40	30	20	45	15
56	15	10	20	20	15
57	15	10	20	15	25
58	15	10	20	15	35
59	15	10	20	15	15
60	100	100	15	100	15
61	100	100	15	100	35
62	100	100	15	100	35
63	100	100	15	100	10
64	100	100	15	100	10
65	100	100	100	100	100

A member was assumed to be eligible for retirement upon meeting the conditions shown in Section D.

These rates were first used for the August 31, 2002 valuation.

Active Member Group Size. The number of active members was assumed to remain constant. This assumption is unchanged from previous valuations. During the first few years after the implementation of the DROP, this assumption will be violated, resulting in fluctuations in the contribution for UAAL%.

MISCELLANEOUS AND TECHNICAL ASSUMPTIONS

Marriage Assumption:	100% of males and 100% of females are assumed to be married for purposes of death-in-service benefits.
Decrement Timing:	Retirements are assumed to occur at the beginning of the year. Decrements of all other types are assumed to occur at the end of the year.
Eligibility Testing:	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
Benefit Service:	Exact fractional service is used to determine the amount of benefit payable.
Decrement Operation:	Disability decrements do not operate during the first 5 years of service. They also do not operate during retirement eligibility.
Normal Form of Benefit:	The assumed normal form of benefit is the straight life form.
Incidence of Contributions:	Contributions are assumed to be received continuously throughout the applicable fiscal year based upon the contribution rate shown in this report, and the actual payroll at the time contributions are made. New entrant normal cost contributions are applied to the funding of new entrant benefits.
Funding Period:	Both the City and employee contribute (in accordance with the provisions of each plan) to the System until the employee enters the DROP or otherwise exits the System.
Pay Increase Timing:	Middle of year

DEFINITIONS OF TECHNICAL TERMS

Accrued Service: Service credited under the system which was rendered before the date of the actuarial valuation.

Actuarial Accrued Liability: The difference between the actuarial present value of system benefits and the actuarial present value of future normal costs. Also referred to as "past service liability."

Actuarial Assumptions: Estimates of future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment (income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

Actuarial Cost Method: A mathematical budgeting procedure for allocating the dollar amount of the "actuarial present value of future benefits" between future normal costs and actuarial accrued liability. Sometimes referred to as the "actuarial funding method."

Actuarial Equivalent: One series of payments is said to be actuarially equivalent to another series of payments if the two series have the same actuarial present value.

Actuarial Gain (Loss): The difference between actual unfunded actuarial accrued liabilities and anticipated unfunded actuarial accrued liabilities -- during the period between two valuation dates. It is a measurement of the difference between actual and expected experience.

Actuarial Present Value: The amount of funds currently required to provide a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest, and by probabilities of payments.

DEFINITIONS OF TECHNICAL TERMS

Amortization: Paying off an interest-discounted amount with periodic payments of interest and (generally) principal -- as opposed to paying off with a lump sum payment.

Credited Projected Benefit: The portion of a member's projected benefit attributable to service before the valuation date - allocated based on the ratio of accrued service to projected total service and based on anticipated future compensation.

Normal Cost: The portion of the actuarial present value of future benefits that is assigned to the current year by the actuarial cost method. Sometimes referred to as "current service cost."

Unfunded Actuarial Accrued Liabilities: The difference between actuarial accrued liabilities and valuation assets. Sometimes referred to as "unfunded past service liability" or "unfunded supplemental present value."

Most retirement systems have unfunded actuarial accrued liabilities. They arise each time new benefits are added and each time an actuarial loss occurs.

The existence of unfunded actuarial accrued liabilities is not in itself bad, any more than a mortgage on a house is bad. Unfunded actuarial accrued liabilities do not represent a debt that is payable today. What is important is the ability to amortize the unfunded actuarial accrued liabilities and the trend in their amount (after due allowance for devaluation of the dollar).